

# **St. Louis Regional Interoperable Communications Land Mobile Radio Network**



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



**STARRS**  
St. Louis Area Regional  
Response System

**Alcatel-Lucent**



East-West Gateway  
Council of Governments &  
the St. Louis Metropolitan  
Statistical Area

<b>Governments</b> (8 Counties, 201 muni's 784 forms of government).....	<b>1164</b>
<b>Heavy Rescue Strike Teams</b> .....	<b>5</b>
<b>Hazardous Material Response Teams</b> .....	<b>6</b>
<b>Incident Support Teams</b> .....	<b>3</b>
<b>Hospitals</b> (5 Level I, 3 Level II, 1 Level III).....	<b>55</b>
<b>LE Tactical Operations Units</b> .....	<b>7</b>
<b>LE Bomb Disposal Teams</b> .....	<b>4</b>
<b>Public Health Agencies</b> .....	<b>9</b>

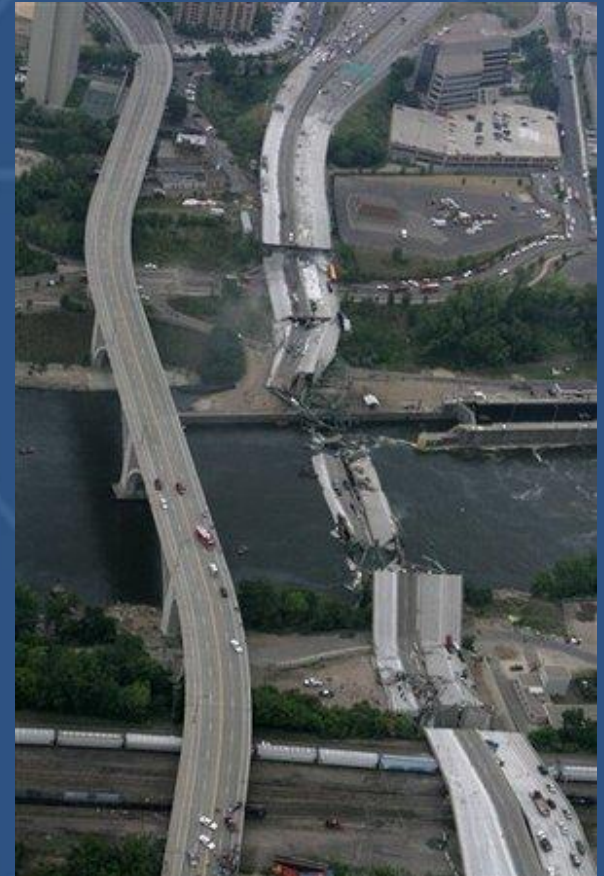
-  Incorporated Areas
-  State Boundary
-  Interstate Highways
-  Other Major Roads





# **Minneapolis, MN. Bridge Collapse,**

- **114,397 PTT over 6 hour response period**
- **318 PTT's per minute, 5 PTT per second**
- **67 calls were delayed over 10 seconds (.06% of all calls)**
- **2 were P3 talk groups, the rest were P7 non-mission talk groups**
- **EMS Task Force responded on their talk group**



# Interoperability Road Blocks

- Plethora of frequencies & equipment used throughout the St Louis UA.
  - Conventional simplex and repeater systems
  - Proprietary trunked systems
  - P25 standards based trunked radio systems
- Vintage 1950's communications equipment
- Systems are overloaded and routinely experience delays in dispatch traffic

# St Louis Regional LMR Plan Development

## ➤ With over 70% participation

- 170 returned surveys and 65 face to face meetings

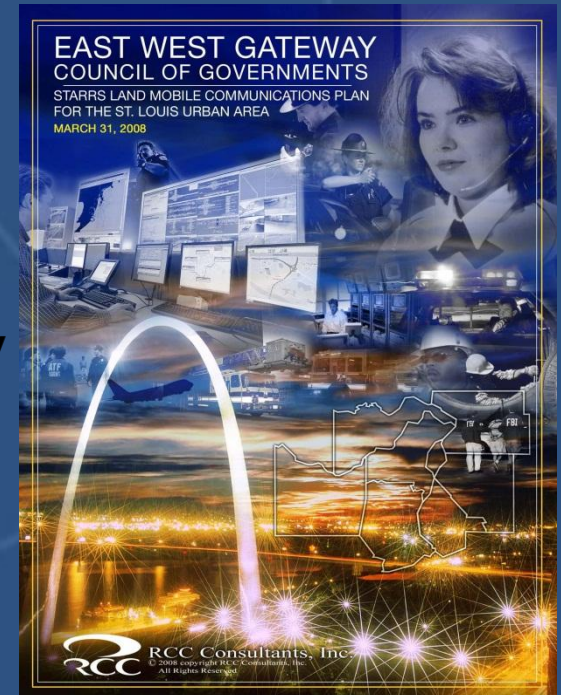
## ➤ Common interest and concerns

- Address current lack of interoperability
- Ability to retain agency independence
- Governance process that would represent all agencies
- No agency would move forward at the expense of another



# St Louis Regional LMR Plan Overview

- A source book for Communications planning
- Provides guidance for a truly regional interoperable radio system
  - Network independent county systems
  - Reliable fault tolerant infrastructure
  - Compatible with IL & MO Interoperability Initiatives



# Milestones

## ➤ Plan Development & Adoption

- November 2007 Planning Process Begun
- March 2008 Plan Roll Out
- June 2008 Unanimous Approval of Plan
- July 2008 Governance Structure Established



# Proposed Microwave Tower Locations

St. Louis Metropolitan Area



EAST-WEST GATEWAY  
Council of Governments

Creating Solutions. Reviving Communities. Rebuilding.

April 2010





# Microwave Digital Network

- Mission Critical Network Supporting Land Mobile Radio
- Interoperable Inter-County Network - County-wide Autonomy
- No Single Point of Failure – Multiple Levels of Redundancy
- 99.9999% Microwave Path Reliability
- Creates True Regional Interoperability

# Project Funding

## ➤ **Grant Funding UASI FY06 – 09, IECGP & PSIC**

- \$12 Million Total Grant Funding
  - ✓ \$4.6 Million Planning
  - ✓ \$7.3 Million Equipment
- Microwave Governance, Planning, Design, Testing & Installation

## ➤ **\$170 Million Local Funding for LMR System**

- April 2009 Jefferson County 911 Dispatch
- August 2009 St. Charles County
- November 2009 St. Louis County

# Regional Interoperability

- Interoperable “Project 25” Radio Systems
  - Illinois Counties
    - Madison, Monroe and St. Clair migrating to State Starcom 21 System
    - Developing plans to add all agencies
  - Missouri Counties
    - Jefferson County 911 Dispatch, St. Charles County and St. Louis County RFP’s under review
    - Franklin County – Developing 2011 funding options
    - City of St. Louis/Metro/Lambert system and adding City Fire 2011



# Summary

- Regional Interoperable Emergency Communications Process
  - Regional Policy & Procedures developed
  - Implementing Regional IP Microwave & Project 25 LMR Systems
  - Efficiently utilizing existing spectrum
- Governance structure allows decision and policy makers to be part of the solution



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